



MORAL DILEMMAS: VARIOUS TYPES, DEFINITIONS, AND QUANTITIES USED IN EXPERIMENTS

Vida Dehnad¹ | Azar Hosseini Fatemi²

¹ Field Department of International Campus, Ferdowsi University of Mashhad, Mashhad, Iran.

² Department of English Language and Literature, Ferdowsi University of Mashhad, Mashhad, Iran.

ABSTRACT

The notion of moral dilemma is frequently used experimentally across some fields such as psychology, social sciences, management, medical studies, and humanities where serious decisions have to be made between two unpleasant things that can have serious life consequences. In the present article, though briefly in scope, we tried to supply related information regarding the noticeable characteristics of dilemmas, their differences, and the regular number of dilemmatic scenarios that have been usually employed in experimental experiences. We, therefore, explained that dilemmas could be of two major types: Self-imposed or other-imposed with either high level or low level of personal involvement. Then, across tentative situations by renowned scholars, the dilemmas have ranged from 2 to 40 stories for experimentation. Furthermore, because of the sensitivity and importance of decision making under dilemmatic situations and different cultural interpretations of these situations, we suggested that the topic still allows for more future investigations cross-culturally across different study fields.

KEY WORDS: dilemma, decision making, high conflict, experiment.

1. INTRODUCTION:

Norman Cousins states, "A human being fashions his consequences as surely as he fashions his goods or his dwelling his goods or his dwelling. Nothing that he says, thinks or does is without consequences" (as cited in Sarkis, 2012, para.1). In fact, such consequences are so important that have often engaged researchers in contriving some tools to forestall them, associating moral orientations or personality traits to them, or defining the situations in which particular decisions have been made.

Moral dilemmas, as hypothetical extreme situations, have been frequently used across several disciplines as tools for examining the moral orientations of individuals. Several scales have also been developed to suss out the ethical behaviors of individuals in their professions as nurses, managers, instructors and so on. In view of dilemma-based empirical experiments, one can also find a budding number of related researches in psychology, neurology, educational psychology and some interdisciplinary fields. However, there is insufficient literature about different types and definitions of dilemmas. The present review article, thus tries to collect, in so far as possible, succinct background information for researchers on various aspects of dilemmas so far dealt with in research contexts.

2. DEFINITION OF DILEMMA:

Dilemmas as defined by dictionaries are very difficult choices that need to be made between two different unpleasant things ("Cambridge University Press", 2016). Dilemmas are sometimes defined and interpreted in different ways since people cannot accede to the reality of moral dilemmas invariantly (McConnell, 2014). For instance, Dougherty (2016) maintains that in medieval era, the moral principle moralists stuck to was that of the lesser evil. This principle, however, was understood in a variety of ways. In Dougherty's own definition, a moral dilemma is a situation in which an individual cannot meet all her/his real impending moral imperatives.

Though there are some variant ways of interpreting moral dilemmas, and people across cultures may have different opinions as to what is moral or amoral (Gray & Keeney, 2015), for almost all people around the globe dilemmas are at least known to be difficult situations. Williams (2015) has offered three important characteristics for dilemmas that can be taken into account:

- A dilemmatic situation may present two or more actions, all of which a person has the ability to perform.
- The person has his own moral inclinations and reasons to decide in one way or another.
- The person cannot choose all the actions.

Since the way people look at things, their goals and desires are different, their definitions of dilemmas may reflect their own priorities. One such example is the case of "false dilemma" ("Nizkor Project", 2012, para.1).

The false dilemma is a situation where a person's reasoning faculty is used to think in black-or-white manner while both situations could be wrong:

- Either X is true or Y is true (when both are wrong or could be wrong)
- X is not true
- Y is true

False dilemmas have garnered attention especially after the former US president George Bush delivered his speech on September 11th event (as cited in Rozniecki, 2012):

"Every nation, in every region, now has a decision to make: either you are with us, or you are with the terrorists" ("CNN", 2001, para.44).

The statement above can be interpreted in Keeling's terms (2005 / 2016) as follows:

"Either you approve of (morally support) the U.S. government's policy response to terrorism or you approve of (morally support) the terrorists as defined (extended) by the U.S. government" (para.12).

3. DIFFERENT DILEMMAS BASED ON NATURE OF SITUATIONS:

Dilemmas are thus categorized into different types in terms of the involvement intensity of the story agents, and difficulty of decision making in such situations. Besides false dilemmas, there are still various types of dilemmas that do not constitute logical fallacies. McConnell (2014) has mentioned some of them. Note that the following McConnell's classifications are based on the nature of the situations:

- Epistemic: This happens only when an agent cannot decide which moral requirement should receive precedence.
- Genuine moral dilemmas: These are also called ontological dilemmas where neither of the conflicting situations is "overridden".
- Self-imposed: This happens as a consequence of one's own wrong deed.
- The world-imposed: Here, the agent has no control over an imposed situation.
- Obligation dilemmas: Here, as Warburton (1996/2016, para.21) explains there are two moral obligations for a person to choose as in the case of one of his pupils who "was forced to choose between filial loyalty and the preservation of his country". His pupil, indeed, "faced with a genuine moral dilemma: whether to stay in France to look after his mother who doted on him; or to set off to join the Free French in England to fight for the liberation of his country. He knew that his mother lived only for him and that every action he performed on her behalf would be sure of helping her to live; in contrast, his attempt to join the Free French would not necessarily be successful and his action might vanish like water into sand".
- Prohibition dilemmas: Here all the options one has are prohibited.

- Single agent: An agent should either do A or B and cannot do both.
- Multi-person: Agent A should do X and agent B should do Y while both A and B find it impossible to do X and Y accordingly.

4. Dilemmas based on their difficulty level for decision-making

Based on the intensity and difficulty of decision-making for an agent, Koenigs et al. (2007) have also defined two important kinds of dilemmas of which the first one includes a wide range of situations:

4.1. High-conflict, up close, personal dilemmas:

In high-conflict personal type, an agent is directly involved in inflicting harm on others. A well-known example of this is “Foot bridge dilemma” in which the agent of decision-making, whoever may be, should decide whether to push a person off a bridge to stop the runaway trolley or not. Dilemmas of these types, as found in neuroimaging experiments, involve moral decision-makers intensely with the emotions (Greene, 2001).

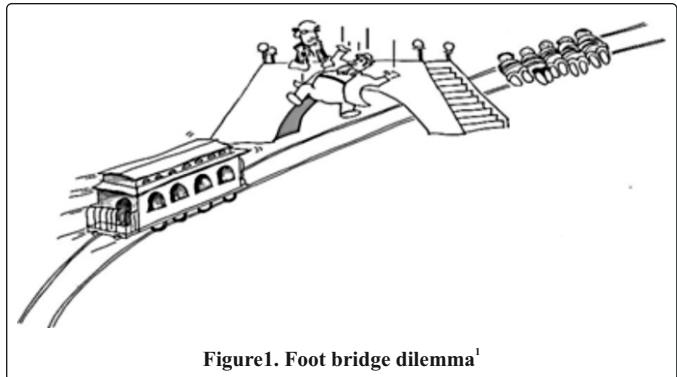


Figure1. Foot bridge dilemma¹

Moreover, these types of dilemmas may elicit more deontological responses than utilitarian ones (Greene, Morelli, Lowenberg, Nystrom & Cohen, 2008). Some researchers believe that for testing cost-benefit utilitarian inclinations versus deontic orientations, stress-laden high-conflict dilemmas are quite appropriate (Green et al., 2008). Indeed, high-conflict dilemmas have long been employed alongside their counterpart low-conflict dilemmas to explore more about various aspects of moral judgment making (e.g., Bernhard et al., 2016; Bostyn & Roets, 2016; Carney & Mason, 2010; Conway, & Gawronski, 2013; Hofmann& Baumert, 2010; Pellizzoni, Siegal, & Surian, 2010; Starcke, Ludwig, & Brand, 2012; Trémolière, Neys, & Bonnefon, 2012).

4.2. Low -conflict dilemmas:

In this category of moral dilemmas, an agent is indirectly involved in inflicting harm on others. A typical famous, long-used example of this category is the “Switch dilemma”, “an iconic philosophical thought experiment” in which moral decision-makers should make up their minds either by the deciding to divert an out-of-control runaway trolley towards a worker who is working on a track, or towards the other track with five other workers (Davis, 2015, para.2).

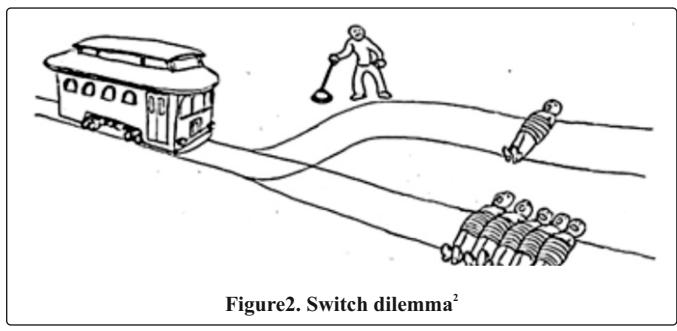


Figure2. Switch dilemma²

Although in the aforementioned dilemmas, the situations depicted are tense, the first one is tenser. Low conflict dilemmas are themselves divided into two categories as explained by Bernhard et al. (2016):

- Low conflict impersonal type: the one where the harm is caused as a side effect of a decision or in a less personal way.
- Low conflict personal: In the low-conflict personal dilemmas, an individual harms another but in a less direct manner as compare to high conflict dilemmas.

5. THE NUMBER OF DILEMMAS USED IN EXPERIMENTS:

Using dilemmas to measure and study different aspects of moral psychology has become a norm (Christensen, Flexas, Calabrese, Gut & Gomila, 2014). Scientists have been using different numbers of dilemmas in own tests:

5.1. Ten dilemmas by Lawrence Kohlberg:

Lawrence Kohlberg (1984), inspired by Piaget's structuralism formulated a cognitive approach towards the development of moral judgment in people (Redzic, 2015). Though his methodology, conception of fixed stages of developing morality, and gender biased explanations have been, justly or unjustly, called weak and “questionable” (Lottabadi, 2008, p.37; Tran, McLean, & Shen, 1991, p.139), Kohlberg, all criticisms aside, is among the researchers who have chosen dilemmas as the metrics of their evaluations. To theorize about the stages of moral development, namely, level 1-pre-conventional morality, level 2 - conventional morality, and level 3 - post-conventional morality, he is said to have used ten dilemmas for each subject (McLeod, 2013).

5.2. Two dilemmas in MCT, or George Lind's moral competence test:

The MCT is based on dual aspect theory of moral judgment working on two important components of cognition and affect (Bužgová & Sikorová, 2013). Moral Competency test of George Lind in its standard form is consisted of two dilemmas of the “Doctor's Dilemma [mercy killing]”, and “Workers' Dilemma [Breaking into a firm]” that were originally constructed as early as 1997 and have been rigorously validated, revised for stylistic errors and as well translated and certified in foreign languages over years (Lind, 2016). Moral competency test is language proficiency sensitive, that is to say; it should not be used with non-proficient and uneducated participants.

5.3. Five dilemmas in Defining Issues Test (DIT) of moral development:

The idea of Defining Issues Test was formulated by Rest and his colleagues around 1970s (Rest, Cooper, Coder, Masanz & Anderson, 1974). Applying a Likert scale, DIT expects ratings and ranking of 12 issues in the dilemmas that represent different moral reasoning schemas. Since Kohlbergian validity of the stages and interpretations of moral development have received serious criticisms (Rest, Narvaez, Thoma, & Bebeau, 2000), neo-Kohlbergian approach has tried to make up for the Kohlbergian failures in DIT tests by defining a gradual developmental growth from “lower to more complex conceptions of social/moral cooperation”(Thoma & Dong, 2014, p.56).

5.4. 40 dilemmas in Greene's validation experiment:

In comparison to earlier experiments, 40 dilemmas in an experiment by Greene was a noticeable move. During Greene's two sectioned experiment, each participant sitting at a monitor in a lab was required to read 40 stories twice (Greene, 2008). The two sections were sequenced as follows:

- Load-block section added more mental cognitive load to the whole act of reading dilemmas by the participants. The participants had to read each moral dilemma loudly so that a microphone could record their answers of yes or no to whether or not the solution act suggested for the dilemmatic problem was moral. Moreover, they had to press a key board quickly upon observing digit 5 on their screens.
- Non-load block section only demanded the participants to read through the dilemmas and to press two related keys to indicate yes or no to a suggested solution.

6. CONCLUSION:

In the current study, we tried to provide some necessary information on the concept of dilemma that is frequently used in educational studies, humanities, social sciences, management, medical studies, and psychology. Though brief in scope, the article can provide future researchers in the related fields with a succinct literature as to the unique aspects of the dilemmatic situations so far dealt with. Surely, various cultural readings of dilemmas still allow for more future researches cross-culturally and across various fields.

REFERENCES:

1. Bernhard, R. M., Chaponis, J., Siburian, R., Gallagher, P., Ransohoff, K., Wikler, D., ... Greene, J. D. (2016). Variation in the oxytocin receptor gene (OXTR) is associated with differences in moral judgment. *Social Cognitive and Affective Neuroscience*, 11(12), nsw103. doi:10.1093/scan/nsw103
2. Bostyn, D. H., & Roets, A. (2016). An asymmetric moral conformity effect: Subjects conform to deontological but not consequentialist majorities. *Social Psychological and Personality Science*. doi:10.1177/1948550616671999
3. Bužgová, R., & Sikorová, L. (2013). Moral judgment competence of nursing students in the Czech Republic. *Nurse Education Today*, 33(10), 1201-1206. doi:10.1016/j.nedt.2012.06.016
4. Cambridge University Press. (2016). Dilemma meaning in the Cambridge English Dictionary. In Cambridge dictionary | Free English Dictionary, Translations and Thesaurus. Retrieved from <http://dictionary.cambridge.org/dictionary/english/dilemma>
5. Carney, D. R., & Mason, M. F. (2010). Moral decisions and testosterone: When the ends justify the means. *Journal of Experimental Social Psychology*, 46, 668–671. doi:10.1016/j.jesp.2010.02.003
6. Christensen, J. F., Flexas, A., Calabrese, M., Gut, N. K., & Gomila, A. (2014). Moral judgment reloaded: a moral dilemma validation study. *Frontiers in Psychology*, 5. doi:10.3389/fpsyg.2014.00607
7. Conway, P., & Gawronski, B. (2013). Deontological and utilitarian inclinations in moral decision making: a process dissociation approach. *Journal of personality and social psychology*, 104(2), 216-235
8. CNN. (2001). CNN.com - Transcript of president Bush's address - September 21, 2001.

Notes:

1. The foot bridge dilemma image has been extracted from Sunstein's "How Do We Know What's Moral?" (2014).

2. The switch dilemma image has been extracted from "Relatively Interesting" (2010).

Retrieved from <http://edition.cnn.com/2001/US/09/20/gen.bush.transcript/>

9. Davis, L. C. (2015). The lifespan of a thought experiment: Do we still need the trolley problem? - The Atlantic. Retrieved from <http://www.theatlantic.com/technology/archive/2015/10/trolley-problem-history-psychology-morality-driverless-cars/409732/>

10. Dougherty, M. V. (2016). Moral dilemmas in medieval thought - Cambridge University Press. Retrieved from <http://www.cambridge.org/catalogue/catalogue.asp?isbn=9781107683891&ss=exc>

11. Gray, K., & Keeney, J. E. (2015). Impure or Just Weird? Scenario Sampling Bias Raises Questions About the Foundation of Morality. *Social Psychological and Personality Science*, 6(8), 859-868. doi:10.1177/1948550615592241

12. Greene, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293(5537), 2105-2108. doi:10.1126/science.1062872

13. Greene, J. D. (2008). The secret joke of Kant's soul. In W. Sinnott-Armstrong (Ed.), *Moral psychology* (vol. 3). Cambridge, MA: MIT Press 35-80.

14. Greene, J. D., Morelli, S. A., Lowenberg, K., Nystrom, L. E., & Cohen, J. D. (2008). Cognitive load selectively interferes with utilitarian moral judgment. *Cognition*, 107(3), 1144-1154. doi:10.1016/j.cognition.2007.11.004

15. Hofmann, W., & Baumert, A. (2010). Immediate affect as a basis for intuitive moral judgment: An adaptation of the affect misattribution procedure. *Cognition & Emotion*, 24, 522-535. doi:10.1080/02699930902847193

16. Keeling, P. (2016). The Bush Disjunction | Issue 52 | Philosophy Now. Retrieved from https://philosophynow.org/issues/52/The_Bush_Disjunction

17. Kohlberg, L. (1984). The psychology of moral development: The nature and validity of moral stages. San Francisco: Harper & Row.

18. Koenigs, M., Young, L., Adolphs, R., Tranel, D., Cushman, F., Hauser, M., & Damasio, A. (2007). Damage to the prefrontal cortex increases utilitarian moral judgments. *Nature*, 446(7138), 908-911. doi:10.1038/nature05631

19. Lind, G. (2016). Moral Competence Test MCT © by Georg Lind. Retrieved from <http://www.uni-konstanz.de/ag-moral/mut/mjt-engl.htm>

20. Lotfabadi, H. (2008). Criticism on moral development theories of Piaget, Kohlberg, and Bandura and providing a new model for research in Iranian students' moral development. *Quarterly Journal of Educational Innovations*, 24, 31-46.

21. McConnell, T. (2014). Moral Dilemmas (Stanford Encyclopedia of Philosophy). Retrieved from <https://plato.stanford.edu/entries/moral-dilemmas/>

22. McLeod, S. (2013). Kohlberg - Moral development | Simply Psychology. Retrieved from <http://www.simplypsychology.org/kohlberg.html>

23. Nizkor Project. (2012). Fallacy: False dilemma. Retrieved from <http://www.nizkor.org/features/fallacies/false-dilemma.html>

24. Pellizzoni, S., Siegal, M., & Surian, L. (2010). The contact principle and utilitarian moral judgments in young children. *Developmental Science*, 13, 265-270. doi:10.1111/j.1467-7687.2009.00851.x

25. Redzic, S. (2015). Youth gender differences in moral reasoning: On gender morality in the light of theories by Kohlberg and Gilligan. *Teme*, 1083-1103.

26. Relatively Interesting. (2010). The trolley Problem: A thought experiment that tests our morality. Retrieved from <http://www.relativelyinteresting.com/the-trolley-problem-a-thought-experiment-that-tests-our-morality/>

27. Rest, J., Cooper, D., Coder, R., Masanz, J., & Anderson, D. (1974). Judging the important issues in moral dilemmas: An objective test of development. *Developmental Psychology*, 10(4), 491-501.

28. Rest, J. R., Narvaez, D., Thoma, S. J., & Bebeau, M. J. (2000). A neo-Kohlbergian approach to morality research. *Journal of Moral Education*, 29(4), 381-395. doi:10.1080/713679390

29. Rozniecki, C. (2012). LOL at the GOP. United States of America: Craig Rozniecki.

30. Sarkis, S. (2012). 50 quotes on consequences | Psychology Today. Retrieved from <https://www.psychologytoday.com/blog/here-there-and-everywhere/201204/50-quotes-consequences>

31. Starcke, K., Ludwig, A., & Brand, M. (2012). Anticipatory stress interferes with utilitarian moral judgment. *Judgment and Decision Making*, 7, 61-68. doi:10.1016/j.psyneu.2010.07.010

32. Sustein, C. (2014). How do we know what's moral? | By Cass R. Sunstein | The New York Review of Books. Retrieved from <http://www.nybooks.com/articles/2014/04/24/how-do-we-know-whats-moral/>

33. Thoma, S. J., & Dong, Y. (2014). The defining issues test of moral judgment development. *Behavioral Development Bulletin*, 19(3), 55-61. doi:10.1037/h0100590

34. Tran, V. D., McLean, G. F., & Shen, Q. (1991). Ideological education and moral education. In *Chinese foundations for moral education and character development*; published with the support of The Chiang Ching-kuo Foundation for International Scholarly Exchange (p.139). Washington, DC: Council for Research in Values and Philosophy.

35. Trémolière, B., Neys, W. D. & Bonnefon, J-F. (2012). Mortality salience and morality: Thinking about death makes people less utilitarian. *Cognition*, 124, 379-384

36. Warburton, N. (2016). A student's guide to Jean-Paul Sartre's existentialism and humanism | Issue 15 | Philosophy Now. Retrieved from [https://philosophynow.org/issues/15/A_students_guide_to_Jean-Paul_Sartres_Existentialism_and_Humanism_\(Original_work_published_1996\)](https://philosophynow.org/issues/15/A_students_guide_to_Jean-Paul_Sartres_Existentialism_and_Humanism_(Original_work_published_1996))

37. Williams, Y. (2015). Moral dilemma: Definition & examples - Video & Lesson Transcript | Study.com [Video file]. Retrieved from <http://study.com/academy/lesson/moral-dilemma-definition-examples-quiz.html>